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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,736	08/25/2006	Gerald Roos	R.307205	1186

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EXAMINER
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NGUYEN, HONG VINH T

ART UNIT	PAPER NUMBER
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2834

MAIL DATE	DELIVERY MODE
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11/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/590,736

Applicant(s)

ROOS ET AL.

Examiner

Hong-Vinh Nguyen

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the at least one flux-conducting element is composed of what is by comparison a reduced number of lamination (claims 29-33) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-16, 18-28 are rejected under 35 U.S.C. 102(b) as being anticipated by Nose (US 6,064,132).

Regarding claim 14:

Nose discloses an armature body 13 with armature teeth 13c, the body and teeth being joined together in one piece together via a short circuit ring 13a, the teeth being offset from one another by equal circumferential angles and each having one tooth neck 13b for receiving an armature winding and one tooth head protruding in the circumferential direction past the tooth neck 13b and terminating in axially directed fore ends, and at least one flux-conducting element 15 mounted on each of the axially pointing face ends of the tooth heads 13c, the flux-conducting elements having a profile corresponding to the tooth head profile (fig. 8,9 and col. 7 lines 4-5).

Regarding claim 15:

Nose discloses an armature as in claim 14 above, wherein the flux-conducting elements are linked by lamination caulking (col. 7 line 8).

Regarding claim 16:

Nose discloses an armature as in claim 14 above, further comprising linking holes in the face ends of the tooth heads, and axially protruding linking pins which can be pressed into the linking holes on the flux conducting elements (fig. 9).

Regarding claims 18-19:

Nose discloses an armature as in claim 14 above, further comprising at least one annular barrier 3 on each of the axially pointing end faces of the short-circuit ring (fig. 1).

Regarding claims 20-21:

Nose discloses an armature as in claim 14 above, wherein the annular-barriers are mounted in a pushbutton-like fashion onto the short-circuit ring (fig. 1 and col. 5 line 31).

Regarding claims 22-23:

Nose discloses an armature as in claim 14 above, further comprising a plurality of linking holes in each end face of the short-circuit ring and a plurality of linking pins congruently located on the annular barriers for pressing into the linking holes 4 (fig. 1).

Regarding claims 24-26:

Nose discloses an armature as in claim 14 above, wherein the armature body is composed of a plurality of identically designed armature laminations resting on one another (fig. 1, 8).

Regarding claim 27:

Nose discloses an armature as in claim 14 above, wherein the flux-conducting elements and/or the barriers are stacked (fig. 1).

Regarding claim 28:

Nose discloses an armature as in claim 14 above, wherein the laminations of the flux-conducting elements and barriers, respectively, have the same lamination thickness as the armature lamination of the armature body (fig. 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nose (US 6,064,132), in view of Gauthier et al. (US Pub. 2002/0163278 A1).

Regarding claim 17:

Nose discloses an armature as in claim 14 above, however fails to disclose two linking holes spaced apart from one another in the circumferential direction are located in each end face of the tooth heads, and two linking pins spaced equally apart in the circumferential direction are located on each flux conducting elements. Gauthier teaches a tooth that is subjected to spot deformation at a plurality of assembly points to clip the teeth laminations together (para. 26). It would be obvious for a person having ordinary skill in the art at the time of the invention to combine the teaching of Gauthier and Nose to strongly secure the laminations together at the tooth end face.

Claim 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nose (US 6,064,132), in view of Dyer et al. (US 6,236,934).

Regarding claims 29-33:

Nose discloses an armature as in claim 14 above, wherein all the flux-conducting elements have the same number of laminations (fig. 8). However, Nose fails to disclose one/two flux-conducting element composed of what is by comparison a reduced number of laminations, are placed on end faces, facing away from one another, or that the number of laminations of the flux-conducting elements embodied with a reduced number of lamination is the same. Dyer teaches the removal of material from portions of the rotors such that these portions are lighter than other rotor portions to correct for machine rotating imbalance and hence reduce or eliminate vibration at the machine rotating frequency (fig. 5, 7, 9 col. 6 lines 31-35).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong-Vinh Nguyen whose telephone number is (571) 270 1743. The examiner can normally be reached on Monday through Friday 8 am to 5 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/590,736  
Art Unit: 2834

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HVN  
11/7/2007

  
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